

GLOBAL SNOWFLAKE NETWORK (GSN)

http://education.gsfc.nasa.gov/gsn



PURPOSE

A partnership that symbolizes the International Polar Year (IPY) by linking indigenous traditional knowledge and observation with scientific data for improved observations and understanding of snow changes.

Serial collection and identification of snowflake shapes and "riming" details coupled with satellite images during the life of a snowstorm.

HYPOTHESIS

- SNOWFLAKE SHAPES DEPEND ON THE TEMPERATURE AND MOISTURE CONTENT OF THE ATMOSPHERE WHERE THEY FORM AND GROW.
- THE SHAPES OF SNOWFLAKES VARY OVER THE WINTER SEASON, WITH THE SOURCE OF THE WEATHER SYSTEM AND DURING THE PROGRESS OF A GIVEN SNOWFALL.
- SNOWFLAKE SHAPES ARE A PROXY FOR CONDITIONS IN THE WEATHER SYSTEMS RESPONSIBLE FOR THE SNOWFALL.
- A GLOBAL SNOWFLAKE NETWORK CAN CONSEQUENTLY BE A DYNAMIC EDUCATION EXPERIENCE AND OF VALUE TO THOSE WHO DEAL WITH POLAR AND WINTER METEOROLOGY

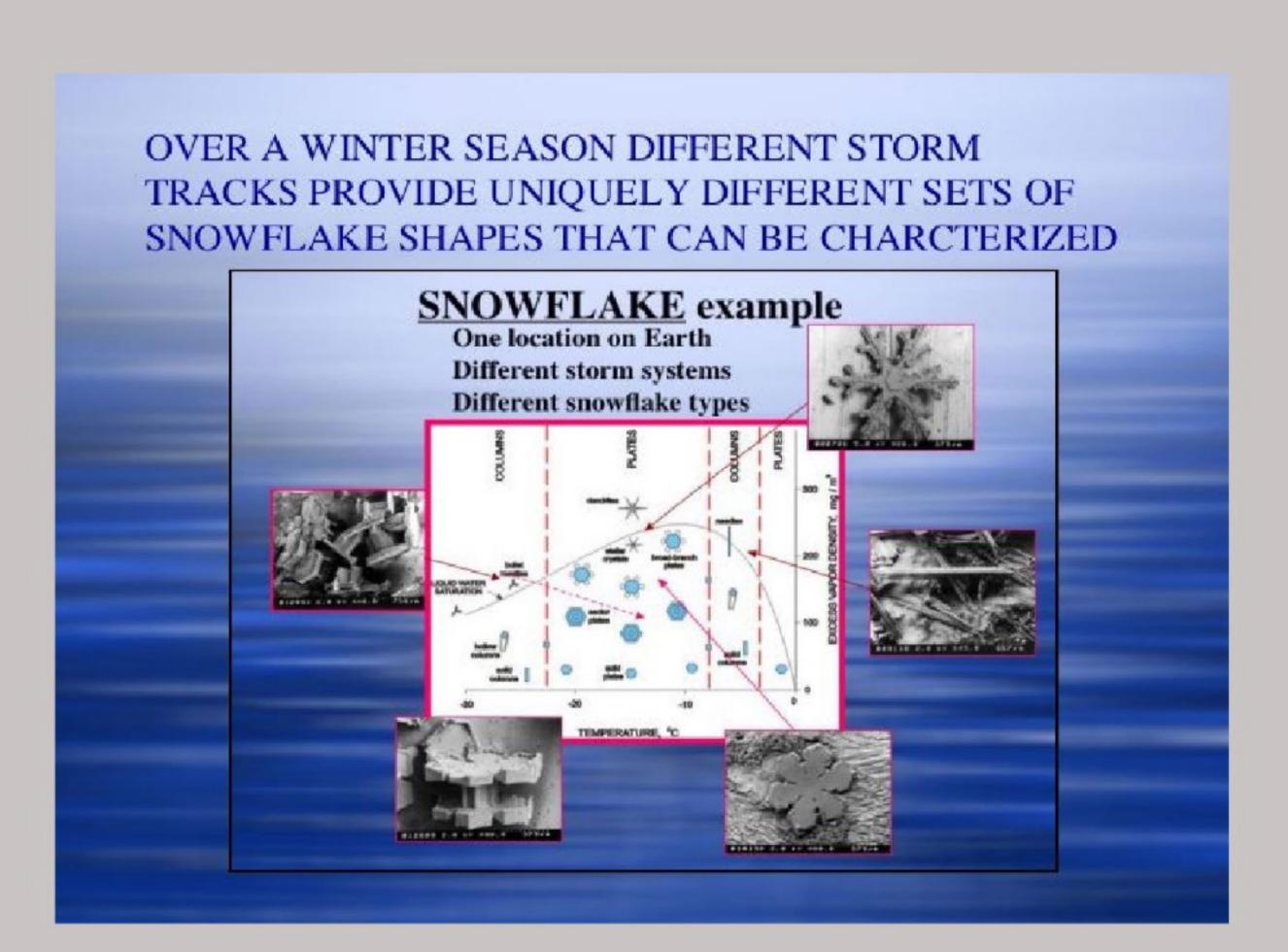
MATERIALS

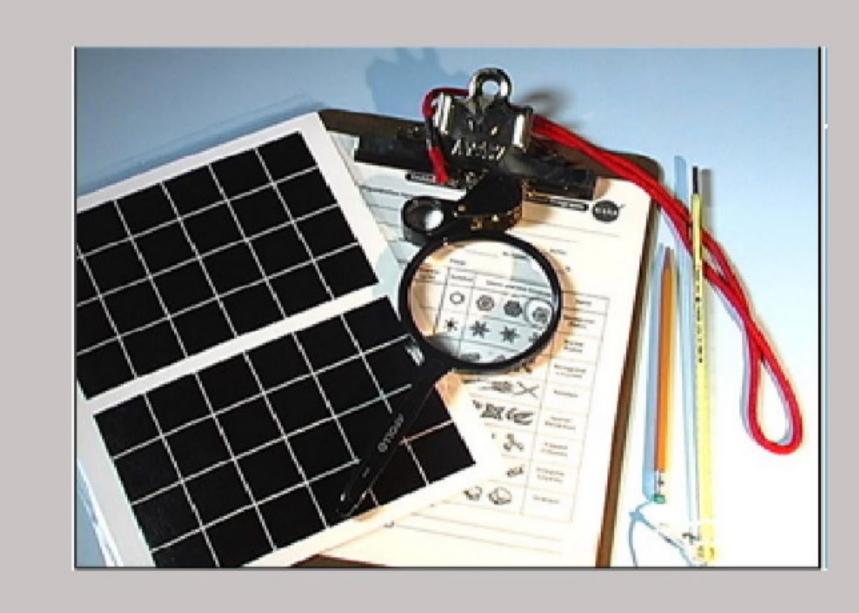
Black ca≋dboa≋d sheet o≋ othe≋ suitable su≋aface with g≋id patte≋n fo≋ collection. This may be downloaded and p≋inted f≋omGSN website

Go to Google Ea≋th o≋ any numbe≋ of sites and obtain latitude/longitude

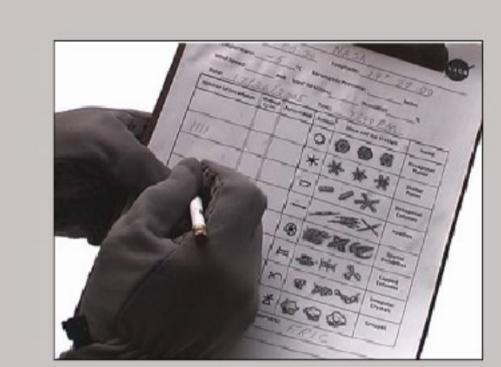
Obtain a magnifie≋ that is capable of 8-10X

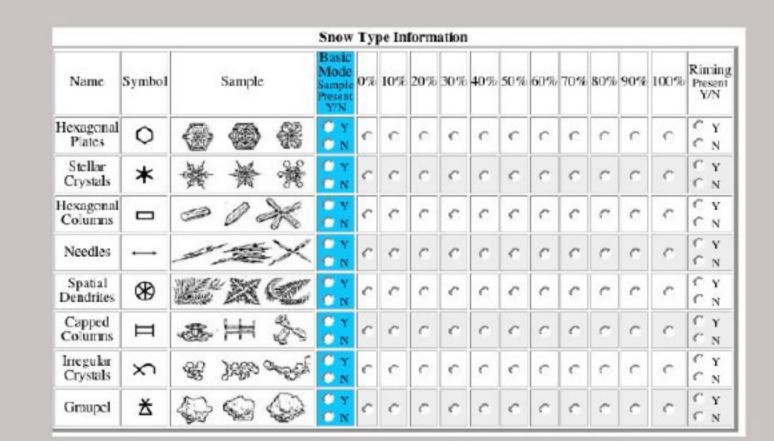
Pencil and data sheet obtained f≌om the GSN website fo≋ data ≋eco≋ding













METHODS and procedures

• Pay attention to you≋ local weathe≋ site fo≋ p≋edictive info≋mation.
• Once the GSN site is mo≋e matu≋e the info≋mation will be available

f≋om the GSN website

• Obtain you≋ latitude and longitude, • a ≋eco≋d of tempe≋atu≋e,

p≋essu≋e, • and wind di≋ection and speed fo≋ the collection site.

- Take collection su≋face and/o≋ snow ca≋d outside and let cool to ambient tempe≋atu≋e.
- Allow snowflakes to fall fost a specific time pestiod and then stemove cast to sheltest whest you will detest ine snowflake shapes and if using the detailed psoceduse-estimate pesticentage of each shape.

 Detestine degsee of siming.

OBTAIN SATELLITE INFORMATION FROM www.weathem.unisys.com
DATA SITE OR OTHER SITES.

